

Amendments to the Specification:

At **page 1**, please amend the first paragraph as follows:

This invention relates to human bladder mapping, and to an apparatus for treatment of the human bladder.

**Page 1**, please amend the sixth paragraph as follows:

The Detection apparatus may be external or internal to the human body, and comprise for example a spaced array of devices adapted to detect electrical activity, and to permit the location of said activity to be determined, for example by mathematical techniques such as triangulation.

**Page 2**, please amend the second paragraph as follows:

The detector may for example be a contact device adapted to touch the interior wall of the bladder and thereby detect electrical activity. In one embodiment the device comprises a cage having a plurality of detection sites thereon, the cage being insertable through the urethra in a collapsed form and being expandable within the bladder into contact with the wall thereof. A suitable reversible expanding mechanism may rely upon relative telescopic movement of inner and outer members of a connector passing to the exterior. In a preferred embodiment the cage is open so that expansion and contraction is unimpeded by fluid within the bladder.

**Page 3**, please amend the first full paragraph as follows:

The number of detection sites are selected to allow the location of electrical activity to be determined with reasonable certainty. In the case of the spherical device noted above, eight equispaced arms may be provided, each with eight equispaced detection sites thereon. The greater the number of detection sites, the more precisely ~~ly can be located~~ the source can be located.

**Page 5**, please amend the third paragraph as follows:

The detection apparatus may be passive in the sense that it acts as an antenna capable of detecting electrical activity at a distance. Alternatively the detection apparatus may include a transmission apparatus adapted to generate a field in the vicinity of the bladder, and detectors adapted to detect distortions of the field which are a consequence of electrical activity in the wall of the bladder.

**Page 6**, please amend the first and second paragraphs as follows:

Such an ablation apparatus acts by disrupting the surface of the muscle so as to change the response thereof to bursts of electrical activity. The ablation may for example scar the surface of the bladder wall so as to prevent electrical impulses following an undesirable path.

A Suitable ablation apparatus may comprise a relatively stiff wire having a bend at the distal end, and an ablation tool at the tip. After insertion into the bladder, the tip is adapted to be steered internally to any desired region by the use of an external control apparatus of a conventional kind. Such an apparatus may rotate the wire, and change the insertion depth.

**Page 6**, please amend the fifth paragraph as follows:

Other features of the invention will be apparent from the following description of a preferred embodiment shown by way of example only in the accompanying drawings, in which: [:-]

Please amend the paragraph bridging **pages 7 and 8** as follows:

In order to position the heat source 22, the device 21 can be moved back and forth in the urethra, and rotated. It may also be possible to bend and unbend the distal portion, using known techniques, so as to ensure that the entire surface of the bladder wall can be reached. In practice the tip of the device 21 may be adapted to emanate an electrical signal, and the device 21

Appl. No.: 10/596,934  
Amdt. dated February 21, 2008  
Reply to Office Action of December 11, 2007

may be used in conjunction with the detector 13 so as to locate the tip accurately on the bladder wall.